

WHAT IS CLAIMED IS:

1. A method of controlling a track apparatus in a lithocell apparatus arrangement wherein said lithocell apparatus arrangement includes a lithographic exposure apparatus configured to expose substrates and the track apparatus configured to prepare substrates before exposure and develop substrates after exposure, said method comprising:

predicting times at which said lithographic exposure apparatus will be available to accept a prepared substrate for exposure from said track apparatus; and

adjusting a rate at which said track apparatus prepares substrates so that a substrate is prepared in time for acceptance by said lithographic exposure apparatus.

2. The method of Claim 1, wherein said track rate is adjusted by delaying times when said track apparatus accepts substrates for preparation.

3. The method of Claim 1, wherein said predicted times is based on a calculated schedule.

4. The method of Claim 3, wherein said calculated schedule is based on a model.

5. The method of Claim 1, wherein said predicted times is based on at least one of statistical data and empirical data.

6. The method of Claim 1, further comprising predicting times when said lithographic exposure apparatus will deliver an exposed substrate to said track apparatus.

7. The method of Claim 1, wherein said track apparatus rate is adjusted in response to a predicted demand timing for the substrate at least N substrates ahead of the substrate most recently accepted by said lithographic exposure apparatus, where N is the number of substrates undergoing preparation in said track apparatus.

8. The method of Claim 1, further including a controller for controlling said exposure of substrates, wherein said controller comprises a prediction unit for providing said predicted times.

9. The method of Claim 1, further including a controller for controlling said track rate and adjusting said track rate in response to predicted times.

10. A device manufacturing method, comprising:
preparing a substrate for exposure in a track apparatus; and
exposing a desired pattern onto said prepared substrate using an associated lithographic exposure apparatus;
predicting times at which said lithographic exposure apparatus will be available to accept a prepared substrate for exposure from said track apparatus; and
adjusting rate at which said track apparatus prepares substrates so that a substrate is prepared in time to be accepted by said lithographic exposure apparatus.

11. The device manufacturing method of Claim 10, wherein said predicted times is based on a calculated schedule.

12. The device manufacturing method of Claim 10, wherein said calculated schedule is based on a model.

13. The device manufacturing method of Claim 10, wherein said predicted times is based on at least one of statistical data and empirical data.

14. The device manufacturing method of Claim 10, further comprising predicting times when said lithographic exposure apparatus will deliver an exposed substrate to said track apparatus.

15. The device manufacturing method of Claim 10, wherein said track apparatus rate is adjusted in response to a predicted demand timing for the substrate at least N substrates ahead of the substrate most recently accepted by said lithographic exposure apparatus, where N is the number of substrates undergoing preparation in said track apparatus.

16. The device manufacturing method of Claim 10, further including a controller for controlling said exposure of substrates, wherein said controller comprises a prediction unit for providing said predicted times.

17. The device manufacturing method of Claim 10, further including a controller for controlling said track rate and adjusting said track rate in response to said predicted times.

18. A lithocell apparatus arrangement, comprising:
a lithographic exposure apparatus configured to expose substrates by exposing a desired pattern onto said substrate;
an associated track apparatus configured to prepare substrates before exposure and develop substrates after exposure; and
a controller configured to control said exposure of substrates and control a rate at which said track apparatus prepares substrates,
wherein said controller is configured to predict times at which said lithographic exposure apparatus will be available to accept a prepared substrate for exposure from said track apparatus and is configured to adjust said track rate so that a substrate is prepared in time for acceptance by said lithographic exposure apparatus.

19. The lithocell apparatus arrangement of Claim 18, wherein said predicted times provided by said controller are based on a calculated schedule.

20. The lithocell apparatus arrangement of Claim 19, wherein said calculated

schedule is based on a model.

21. The lithocell apparatus arrangement of Claim 18, wherein said predicted times provided by said controller are based on at least one of statistical data and empirical data.

22. The lithocell apparatus arrangement of Claim 18, wherein said controller is further configured to predict times when said lithographic exposure apparatus will deliver an exposed substrate to said track apparatus.

23. The lithocell apparatus arrangement of Claim 18, wherein said controller adjusts said track apparatus rate in response to a predicted demand timing for the substrate at least N substrates ahead of the substrate most recently accepted by said lithographic exposure apparatus, where N is the number of substrates undergoing preparation in said track apparatus.

24. A computer program comprising a computer-readable storage medium having recorded thereon executable instructions that are adapted to control at least part of a lithocell apparatus arrangement, wherein said lithocell apparatus arrangement comprises a track apparatus for preparing substrates for exposure and developing exposed substrates and an associated lithographic exposure apparatus for exposing substrates, said executable instructions comprising:

predicting times at which said lithographic exposure apparatus will be available to accept a prepared substrate for exposure from said track apparatus; and

adjusting a rate at which said track apparatus prepares substrates so that a substrate is prepared in time for acceptance by said lithographic exposure apparatus.

25. The computer program of Claim 24, wherein said track rate is adjusted by delaying times when said track apparatus accepts substrates for preparation.

26. The computer program of Claim 24, wherein said predicted times is based on a calculated schedule.

27. The computer program of Claim 26, wherein said calculated schedule is based on a model.

28. The computer program of Claim 24, wherein said predicted times is based on at least one of statistical data and empirical data.

29. The computer program of Claim 24, further comprising predicting times when said lithographic exposure apparatus will deliver an exposed substrate to said track apparatus.

30. The computer program of Claim 24, wherein said track apparatus rate is adjusted in response to a predicted demand timing for the substrate at least N substrates ahead of the substrate most recently accepted by said lithographic exposure apparatus, where N is the number of substrates undergoing preparation in said track apparatus.